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- (54) Title: WOUND DRESSINGS FOR THE CONTROLLED RELEASE OF THERAPEUTIC AGENTS

(57) Abstract: A wound dressing material for controlled activation of a wound healing therapeutic compound in the presence of a protease enzyme in a wound fluid, the material comprising: a medically acceptable polymer; a wound healing therapeutic agent; an inhibitor of the protease enzyme; and a linker group which is cleavable by the protease enzyme, wherein the activities of both the wound healing therapeutic agent and the inhibitor are increased by contacting the wound dressing material with a wound fluid containing the protease enzyme. For example, the enzyme may be a matrix metalloproteinase, the therapeutic agent may be a reactive oxygen scavenger, and the inhibitor may be a tissue inhibitor of metalloproteinase (TIMP).